Nor protecting transmitted data signals one uses transceivers which communicate with each other with a unique and synchronous channel hopping sequence. For this purpose each transceiver contains along with the customary circuits for signal processing a program part (22) for a channel hopping sequence and a clock device (24, 26) which is synchronized by a public radio time signal, as well as a channel selection circuit (20) and a channel switch (10). In case of a call the receiving and transmitting devices are both adjusted to a certain channel hopping sequence in accordance with the identification number of the receiving device so as to exclude the participation of further devices in communication. Channel hopping is effected at a relatively high frequency of approximately one megahertz so that there is no possibility of the connection being interrupted by a stronger transmitter, as is possible with conventional CB radio systems for example. Transmitter and receiver can be synchronized quickly and simply on the basis of the public time signal.

(FIG. 1)